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<p align="center">Division of Forensic Science</p> <p align="center">LATENT FINGERPRINTS PROCEDURES MANUAL</p>	<p align="center">Amendment Designator:</p>
	<p align="center">Effective Date: 29-January-2004</p>
<p align="center">1 INTRODUCTION</p> <p>While general procedures for evidence examination are usually divided into two categories, those for porous and those for nonporous surfaces, each of the categories contains an enormous variety of materials with individual properties that may enhance or diminish the effectiveness of a particular technique. The composition of palmar sweat is predictable to a high degree, yet the components of impression residue may include extraneous matter transferred to friction ridge skin from many possible sources. In some instances, techniques designed to better visualize the contaminants are more productive than those utilized to detect smaller or uncertain quantities of inherent palmar sweat composition. Other circumstances may present a substrate which consists of material so similar to the residue that particular reagents will cause an overall reaction and prevent any distinction between impression and background.</p> <p>In theory, any contact between the source of an impression and a surface results in a transfer of material between the two objects. Successful detection of that transfer to reveal a sufficient impression requires that the surface is receptive for a deposit, that is, relatively smooth, clean, and dry. The definition of "relatively" is imprecise and highly dependent upon the nature of the transfer medium. Glass is receptive to palmar sweat transfer when dry but not when coated with dew, yet may be receptive to a deposit of sebaceous material even when submerged in water. A piece of metal covered with a film of oil may be unreceptive to a deposit of sebaceous material yet provide a clear, distinct impression when touched by dry, clean skin.</p> <p>Residue once deposited is immediately subjected to environmental conditions. Heat, humidity, air movements, airborne contaminants, chemical reactions and interactions, light, time, and moisture alter the condition and dictate the chances for detection of any deposit. While any precise determination as to the effects surface condition, transfer medium, and subsequent environment may have on the successful visualization of impression residue is impossible, one determination is very clear. Most factors concerning the survival of the impression are negative and when of sufficient degree or combined in various arrangements will diminish or destroy the likelihood of detection.</p> <p>Visual examination of evidence is the first step in the processing procedure. Visual examination is the inspection for latent print residue that may be preserved photographically or determined to be unsuitable as it exists. In addition, visual inspection is the mechanism by which processing procedures are selected from observation of the residue, its condition, and composition, and of the article. Expertise is the ability of an examiner to determine as many factors as possible and to select examination approaches accordingly.</p> <p>Judgment of factors in the selection of processing approaches must be both tempered and augmented by a basic philosophy toward evidence examination. Seeking a visualization of latent print residue, which may or may not be present, without tangible proof creates a common dilemma regarding the extent of the pursuit. Negative results with any given technique are not a sure indication of non-existence and positive results with any given procedure do not provide assurance that the examination is complete. A basic philosophy which demands that exploration continues until all avenues are exhausted or until what is sought is found should guide all evidence examination procedures. Fixed methods of even the best intentions requiring minimum processing steps, check lists, or pre-determined consequences are no substitute for dedicated and reasoned logic to find what is sought, the identity of the suspect whenever possible.</p> <p>This Procedures Manual is arranged according to protocols for various types of substrate materials and residues encountered in latent print processing. It contains further descriptions when surface condition and/or deposit factors are a major influence upon technique selection. Additional factors may require some modification or adjustment to the technique or sequence of techniques indicated. In some instances procedures which fall into the general processing guidelines for a particular substrate but are inappropriate or destructive due to other factors should be modified so as to accomplish the best possible processing sequence for that specific item. This Procedures Manual can not list every substrate an examiner will encounter in casework and all procedures are subject to revision as new techniques or research reveals improvement.</p> <p align="right">◆End</p>	